STATEMENT TO NOSB (10-06).DOC

October 4th, 2006

To: The National Organic Standards Board

R.e. : Response to the Invitation for Public Comment on Aquaculture Standards

Dear Boardmembers,

I would like to offer the following comments to the Board, both as the President of Kona Blue Water Farms, LLC, and as a representative of the Organic Seafood Council.

The Organic Seafood Council is an industry association of producers, brokers, wholesalers, certifiers and other industry entities that have come together to allow us to speak with one voice on issues that concern us. These deliberations of your Board are of tremendous importance to our Council, and to the future of organic seafood.

Kona Blue is the first integrated open ocean fish farm and marine fish hatchery in the U.S. We are growing sashimi-grade Kona Kampachi™ in waters over 200 ft deep, using innovative hatchery techniques, and advanced ocean engineering. We are committed to environmentally-sound aquaculture, and we believe that open ocean fish farming can and should be organic. Our fish deserve it, the environment deserves it, and American consumers deserve it.

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The principles of organic production lie at the core of our company. Our mission is "to expand the environmentally sound production of the ocean's finest fish". Our core values are sustainability, product quality and consumer health, all of which are fundamental organic principals, and the essentials of organic consumers' aspirations. Additionally, our Chairman, Mr Thomas McCloskey, was formerly the early lead investor and Chairman of Horizon Organic Dairy Company, one of the largest organic success stories in the world.

I will respond below to the specific questions delineated in the September 8th "Invitation for Comment …". However, firstly I would like to address what I believe is a wide misapprehension that fish farming is inconsistent with organic principles. This perspective has been deliberately fostered by some of the prior testimony to this Board: testimony that is, at best ill-informed, or at worst, broadly slanderous.

The best way to address these untruths is through transparency. I therefore issue an open invitation to you as a Board, and as individuals, to come to Kona, and visit our offshore farm site, and our hatchery operation. There you will see the waters in which we culture our fish – some of the cleanest waters on earth. You can snorkel around our cages, and see that the water quality up-current of our fish cages is indistinguishable from the down-current waters. You will see how we rear our fish in the hatchery, using algae that we grow ourselves, to feed to zooplankton, which in turn feeds our larval fish. You will see the innovative submersible cage designs that our company has deployed, which reduce the likelihood of escapes, and minimize impact on the view plane. You will see us humanely harvest our Kona Kampachi™ – a fish that in the wild is considered unsaleable, but which we, through our rigorous commitment to quality in our hatchery and grow-out procedures, are able to render into a high-end sashimi-grade product, prized by top chefs throughout the country.

I realize that it is difficult for you all, with your busy schedules, to travel to Hawaii, so I have inserted here, amongst the text of this submission, photographs of our fish and our fish farm, that should help inform your thinking. I would also commend you to our web site (www.kona-blue.com), where we have video footage of our fish offshore, details on our comprehensive permit and monitoring processes, and – in the interests of complete transparency with our community and our customers – water quality data from our ongoing sampling program.

I hope that this will help you to understand that while "fish farming" is often framed as a pejorative, we believe that it can and should be conducted in an environmentally sound manner, in strict accordance with ecological and organic principles. Certainly, there are additional costs that we must bear to ensure that our fish farm meets the standards that we have already, independently set for ourselves. But we also hope that organic certification can provide recompense for what we have accomplished so far, and can further spur us – and other farmers like us – towards continuing improvements in our farming methods.

This is what organic certification has done for dairy, beef, poultry and crop production. This is what it should also do – no, this is what it ***must*** do - for seafood.

Sincerely, with aloha,

Neil Anthony Sims
President

Addressing your specific questions :

Species or Production Method Specific Standards:

We concur with the Livestock Committee's belief (that "… one standard … is appropriate … except when absolutely necessary …"). As operators of an innovative offshore fish farm, we believe that it will become patently self-evident when Production Specific Standards might be necessary, and concern over this matter should not inhibit further forward progress on the substantive issues.

It strikes us as strange that some ocean conservation interests advocate against the organic certification of carnivorous fish, or cage culture. We would suggest that rather than proscribing these practices, adequate organic standards instead be established to incentivize and encourage farmers growing carnivorous fish, or using cage culture systems, to improve – and continue to improve – their production systems. By such examples, organic fish farming can improve the overall sustainability and healthfulness of all fish farms.

No single group of animals or containment method should be excluded from organic certification unless there are compelling reasons. If escapes are a concern, then regulate escapes or genetics. If fish meal and fish oil are an issue, then address replacement diets. But we urge you to not banish marine fish, grown in their natural habitat, and fed on natural diets, from any chance of meeting organic criteria. Arne Naess, the founder of the Deep Ecology movement, has said "The frontier of the environmental crisis is long and varied, and there is a place for everyone". Aquaculture is indeed on this frontier. We need to establish a vision for sustainable, environmentally sound, organic cage culture of carnivorous fish. And then we need to encourage farmers to strive towards that goal. We cannot sacrifice "better" for the sake of "perfect".

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Impact on the Environment:

One of the fundamentals of organic culture is that animal wastes are simply nutrients that feed further productivity within the ecosystem. In offshore waters, especially in the tropics, the ocean's productivity is severely limited by the oligotrophic (nutrient poor) waters. Our offshore farm operation acts as a huge fish aggregating buoy. As we are in exposed, deep waters, fish wastes are not a water quality issue. (For evidence of this, please see our water quality data from monthly NPDES monitoring around our farm, on our web site at http://www.kona-kampachi.com/community-relations.html). Aquaculture effluents are only an issue if they are concentrated in inshore waters or protected embayments. In the open ocean, or on outer shelf areas, fish farm effluent is rather a nutrient that could help increase overall productivity. This recycling of nutrients then clearly fulfills one of the principles of organic systems. The question then becomes one of appropriate siting of farms: they should ideally be in deeper water, stronger currents, or more open locations. The standards set here should reflect these guidelines.

The issue of cage or net pen operations may be of concern in salmonid culture (where cultured fish are either non-native, or where escapes could blur the subtle genetic distinctions between adjacent watersheds). However, in open ocean culture of marine fish, these concerns are readily addressed by ensuring that the following apply: (i) all fish cultured must be native to the area, AND (ii) there be no significant genetic differences between the fish inside the cages and the wild fish outside the cages (i.e. no deliberate selective breeding, but continued integration of wild broodstock into the captive gene pool), AND (iii) the cage or net pen systems must demonstrate a reasonable level of precaution against escapes (i.e. predator nets, or mesh material that minimizes risk of breaches). These protections should ensure that if escapes do occur, there will be no discernible impact on the surrounding ecosystem, or on wild fish genetics.

If we are going to ask for only closed aquaculture facilities, or land-based fish farm operations, are we also going to ask that cows only be raised in barns, and chickens only inside sheds? Growing a fish on land, or in closed containment, is woefully inefficient. It is like growing a fish out of water. These creatures belong in the ocean … it is where they thrive best.

Differences between Organic and Conventional Aquaculture Standards:

Consumers are greatly concerned about the healthfulness of seafood products, and the sustainability of current practices of exploitation of marine resources. Organic standards should provide assurance that aquaculture fish are grown in a manner that promotes both these principles. Kona Blue is already adhering to almost all of the other practices and standards set out in the NOAWG interim report. So would organic standards make much of a difference for us? Emphatically: Yes! Organic standards would affirm the passion and the principles that we apply to our farm operations, and would provide recognition – and hopefully some premium - in the marketplace for these efforts.

Other offshore fish farm operations may not share our passion and our principles, and may opt for using conventional, rather than organic standards. They may wish to culture fish in higher densities, where there may be detrimental impacts on the surrounding ecosystems. They may choose to use non-NOP approved practices in the larval culture stages, or in the management of their fish offshore. They may place less value on the welfare of their fish, and more emphasis on cost reductions. We believe that Kona Blue – and companies such as ours - should be accorded some widely-recognized mark of approval that we are meeting or exceeding standards for organic culture. USDA is the recognized mark that consumers look for, and that we seek.

There is one area where organic standards will probably differ from our current practices: feed. This is discussed below.

Use of Fish Meal and Fish Oil:

Wild harvest, per se, is not proscribed under the NOSB Principles of Organic Production and Handling (adopted October 17, 2001, section 1.7). Indeed, fish meal and fish oil clearly meets many of the considerations under the "NOSB Guidance on Compatability … and Consistency …" (adopted 4/29/04), such as "… promote(s) animal health … by enhancing … biological properties" (1); being "… made from renewable resources" (3); has "…a positive influence on the health, natural behavior and welfare of livestock" (4); "allows for an increase in the long-term viability of organic farm operations" (6); and being "consistent with international organic regulations and guidelines" (10). Further, anything that increases the availability of sustainably raised fish will have "a positive impact on biodiversity" (12), by removing some of the fishing pressure on many wild fish stocks that are overexploited, or employ destructive fishing practices.

Organic aquaculture should still strive towards a reduction in fish meal and fish oil inclusion rates. This makes both sound economic sense (given the supply and price volatility in these commodities), and sound sense from a fisheries biology / deep ecology perspective (reducing our reliance on natural resources). Kona Blue has already made significant steps in this direction, having independently eschewed our previous "organic" fish feed (largely fishmeal and fish oil) and moved towards a more 'sustainable' diet for our fish (see Note 1).

Any provisions that encourage other companies to do likewise – or that encourage us to further these efforts - should be embraced. We support the seven year allowance, anticipating that this period will see tremendous growth in organic aquaculture, which will then, by itself, provide a source of "organic" fish meal and fish oil from processing by-products of this organic seafood.

Certainly, in an ideal world, we might let all the wild fish live free. However, there is significant consumer demand for marine carnivorous fish. This demand is not created by the proliferation of farmed salmon. Rather, it is the driving force behind the overfishing throughout much of the world. Let us therefore encourage persistent improvements, and ongoing refinements in fish feed formulations, to reduce reliance on reduction fisheries, and increase recycling of other edible seafood by-products. But let us not ban their use altogether.

Sources of Fish Meal and Fish Oil:

Issues of how to certify stocks as sustainable, and who should do the certifying, should not impede the overall development of organic seafood standards, However, we would like to caution that maximum sustainable yield (MSY) may not be the best sole criterion to apply: many fisheries that operate at MSY still have detrimental impacts on the wider ecosystems, or employ destructive fishing practices. The fundamentals of ecosystem sustainability should be rigorously applied to wild fisheries assessment, regardless of which agency provides the certification.

Further, the NOAWG Interim Report and subsequent discussion has not evidently drawn any clear distinctions between the various origins of the fish meal and fish oil. The divergent sources of these products should be clearly addressed. To wit:

Firstly, there should be no restriction on the use of fish meal and fish oil that is derived from processing by-products of any organic seafood. The principles of efficiency in recycling of nutrients imply that this origin for feed constituents should be approved automatically, unrestrictedly, and in perpetuity. No certificate of sustainability should be required for these products (as organic, they should already clearly be sustainable), and there should be no end to their permitted use.

Likewise, there should be no restriction on the amounts of fish meal and fish oil from processing by-products of any sustainbly managed wild stock, provided that the concerns r.e. POPs that were laid out in the NOAWG Interim Report Option A are ascribed to. This thereby ensures that fish meal and fish oil from these sources is healthful, and sustainable, as well as optimizing the use and recycling of resources that would otherwise become a solid waste disposal issue.

Finally, fish meal and fish oil from sustainably managed reduction fisheries (for fish such as capelin, menhaden and anchovies that are not normally considered edible) should be allowed under the seven year window. We would strongly recommend that the 1:1 ratio of wet-fish-in to wet-fish-out be adopted, with some ongoing tightening of the standards over time, to reduce the inclusion rates of these products. There is a rationale for this ratio: it fully conserves ocean protein and oil resources from fish that are low on the food chain (more trophically efficient).

Slaughter By-products in Aquaculture Feed:

Kona Blue does not use terrestrial animal processing by-products in our diets, purely in response to market pressures. However, we earnestly believe that it makes sound ecological sense to do so. Use of these by-products would help alleviate pressures on wild fish stocks, maintain more natural rations for cultured fish, and also reduce the loading in diets of marine-origin POPs from fishery by-products.

We recognize that there are concerns with blanket approval for use of *all* land animal byproducts in organic fish feed. However, there are also compelling arguments for the use of some specific by-products from slaughter of terrestrial animals. There is nothing in the NOSB Principles of Organic Production and Handling (adopted October 17, 2001) that would obviate use of these selected by-products. However, several of these principles suggest that these products *should* be included in fish feeds. Use of slaughter by-products would reduce the need for synthetic materials in fish diets (1.1); it would "recycle materials of … animal origin ..." (1.2.6); and it would "(promote) animal health and welfare …" (1.3.4) by improving the nutritional balance for the fish.

The only tenable concern for use of these by-products is the potential for transmission of prion diseases from the terrestrial animals to the fish, and thereby to the humans. This concern is simply and unequivocally refuted by insisting that only slaughter products from *organic* animals should be used in fish diets. If there is a risk that prions might possibly be transmitted indirectly, from the terrestrial animal to the fish and thereby to the consumer, there is surely a greater risk that the prions would be transmitted from the animal directly to the consumer.

If there is still some unease in your minds, or the minds of consumers, then perhaps only selected, *inert* by-products from terrestrial animals should be used. This might include all non-ruminant by-products, or possibly just selected poultry and porcine by-products that would render to virtually zero the chances of prion transmission (by virtue of heat or hydrolysis treatments, or because the by-product is not associated with nervous tissues). Such by-products might include hydrolyzed feather meal and poultry fat, spray dried blood meal, or pig byproduct meals and solubles.

Finally, the postulation that some vegetarian-yet-piscivorous consumers might take umbrage to their fish being fed with selected land animal by-products is, we believe, a mere red herring. The consumers of such fish will still always be eating fish. There is no land animal in such a fish. Certainly, some of the molecules in the fish might once have inhabited land animals. But this would also be the case if land animal by-products were used in fertilizers for crops. The worst possible result would be that a small subset of consumers might choose not to eat organic fish, or might choose only to eat herbivorous organic fish. However, we believe that the net gain for organic aquaculture of selected use of these products is too great to ignore on the basis of such trifles. We also believe that the majority of consumers and retailers will eventually concur with this rational, ecologically-sound position.

Note 1: The “organic” fish feed that Kona Blue previously used was produced by a Canadian supplier to meet UK Soils Association standards, using fish meal and fish oil from fisheries classified as ‘sustainable’ using FAO-IFFO standards. This was primarily comprised of Peruvian anchovies. The Peruvian anchovy fishery is exceptionally well-managed, and is certainly sustainable at current fishing pressures. We also recognize, however, that if aquaculture is going to scale, to help meet the growing worldwide demand for seafood, there will be increasing pressure on this fishery. Under this scenario, these stocks are certainly not scalable. We therefore have already begun to move to include more agricultural grains and more edible seafood processing by-products in our Kona Kampachi™ diets. Our “Kona Pacific” diet, which we currently use, replaces 50% of the fish meal and 25% of the fish oil with agricultural grain-sourced proteins and oils.

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